

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method of forming a metal deposit on a substrate, the method including ~~the steps of~~:

providing a substrate with a first layer of a catalyst material ~~whose activity as a catalyst~~ for the deposition of metal from a solution of metal ions, which catalyst material is deactivatable by heating is adjustable by an irradiative technique;

using an [[said]] irradiative technique to selectively heat selected regions of the first layer to pattern the first layer into active and non-active regions; and

exposing the resulting pattern of active and non-active regions to a solution of metal ions whereby metal is selectively deposited therefrom onto the active regions of the first layer.

2. and 3. (canceled).

4. (currently amended): A method according to claim 1, wherein the said irradiative technique forms active regions of the said first layer isolated by non-active regions from other surrounding catalytically active regions.

5. (currently amended): A method according to claim [[3]] 1, wherein a thermal imaging layer is provided below said first layer to assist the selective heating of said selected regions of the first layer.

6. (currently amended): A method according to claim [[3]] 1, wherein a thermal imaging layer is provided over said first layer to assist the selective heating of said selected regions of the first layer; and including the further step of removing the thermal imaging layer after the step of patterning the first layer into non-active and active regions.

7. (original): A method according to claim 1, wherein the radiation is of infrared wavelength.

8. (original): A method according to claim 1, including the step of selectively depositing the first layer onto selected locations of the substrate corresponding coarsely to those locations where metal is to be deposited.

9. (currently amended): A method of forming a metal deposit on a substrate, the method including ~~the steps of:~~

depositing on selected locations of a substrate coarse zones of a first layer of a material whose activity as a catalyst for the deposition of metal from a solution of metal ions is adjustable by an irradiative technique;

using said irradiative technique to pattern each coarse zone into active and non-active regions; and

exposing the resulting pattern of active and non-active regions to a solution of metal ions whereby metal is selectively deposited therefrom onto the active regions of the coarse zones of the first layer.

10. (original): A method according to claim 9, wherein said first layer zones are deposited by ink-jet printing.

11. - 12. (canceled).

13. (original): A method according to claim 1 of forming at least one metal element of an electronic device.

14. (original): A method according to claim 13, wherein said electronic device forms a component of an electrical or electronic device.

15. (original): A method of producing an electrical or electronic circuit, including the step of forming at least one metal element thereof by a method according to claim 1.

16. (currently amended): A ~~logic circuit produced by~~ a method according to claim 15, wherein the electrical or electronic circuit is a logic circuit.

17. (currently amended): A ~~display or memory device including active matrix circuitry produced by~~ a method according to claim 15, wherein the electrical or electronic circuit is a display or memory device including active matrix circuitry.

18. (currently amended): An array of interconnections produced by a method according to claim 15, wherein the electrical or electronic device comprises an array of interconnections.

19. (currently amended): A method according to claim 1, wherein the first layer comprises a composition including a catalyst for the reduction of metal ions, and a chromophore.

20. (currently amended): A composition method according to claim 19, wherein the chromophore is a chemical moiety that absorbs infrared radiation.

21. (currently amended): A composition method according to claim 19, wherein the chromophore is carbon black.

22. (canceled).

23. (original): A method according to claim 1, wherein the deposition of metal from the solution of metal ions is an electroless plating technique.

24. (currently amended): A method of forming a metal deposit on a substrate, the method including the steps of:

providing a substrate with a first layer of a catalyst material whose activity as a catalyst for the deposition of metal from a solution of metal ions, is adjustable by an irradiative technique which catalyst material is deactivatable by heating;

using [[said]] an irradiative technique to selectively heat selected regions of the first layer to pattern the first layer into active and non-active regions; and

using the resulting pattern of active and non-active regions to control the deposition of metal onto the substrate from a solution of metal ions.